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THE SOUTH AMERICAN TINGITIDÆ (HEMIPTERA)
DESCRIBED BY STÅL.

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(PLATE XXXVI)

Carlos Stål described forty-six species of Tingitidæ from the Western Hemisphere, three of which have been placed in synonymy. In the Annals of the Carnegie Museum, XVI, 1926, pp. 375-380, pl. XXXIV, Drake treated those forms known to occur in North and Insular America.

The present paper deals with the South American Tingitidæ characterized by Stål. Through the auspices of the Carnegie Museum, the authors have been very fortunate in securing the services of Madam Thérèse Ekblom, a very competent artist, for making figures 1-11, inclusive, of Stål's types from South America in the Stockholm Museum. Figures 12-15 were made by Miss Margaret E. Poor. A number of Stål's types have also been figured by G. C. Champion in the Biologia Centrali-America and in the Transactions of the Entomological Society of London, 1898, pp. 55-64, pls. II and III. The writers have examined specimens of all the American tingitids described by Stål, except *Leptodictya dorni*, *L. lepida*, *L. fuscocincta*, *Leptopharsa furcata*, *L. marginella*, and *Stephanitis mitrata*.

1. **Monanthia monotropidia** (Stål)

Monanthia (Physatocheila) monotropidia Stål, Rio Hemip., I, 1860, p. 63. (Rio Janeiro, ♀, Mus. Holm. et Stål).

Monanthia (Monanthia) monotropidia Stål, Enum. Hemip., III, 1873, p. 133. (Rio Janeiro; Bogota; Mus. Holm.).

Monanthia monotropidia Champion, Biol. Centr.-Amer., Rhynch., II, 1898, p. 47, Pl. III, figs. 24, 24a, 24b.

Very common and widely distributed in Insular and Central America, Mexico, and the northern half of South America. Specimens have been examined from

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Haiti, Cuba, Jamaica, Mexico, Guatemala, Costa Rica, Honduras, Panama, Peru, and Brazil. Stål's types were taken at Rio Janeiro, Brazil. Breeds on *Cordia gerascanthus* and *Cordia* spp.

2. *Teleonemia triangularis* (Blanchard) (Plate XXXVI, fig. 14)

Lacometopus albilaterus Stål, Rio Hemip., I, 1860, p. 65 (Rio Janeiro, ♀; Mus. Holm.).

Tingis (Americia) albilatera Stål, Enum. Hemip., III, 1873, p. 131 (Rio Janeiro; Mus. Holm.).

Tingis triangularis Blanchard, in d'Orbigny, Voy. Amer., VI (2), 1843, p. 219, Pl. XXIX, fig. 10 (colored).

Teleonemia triangularis Champion, Biol. Centr.-Amer., Rhynch., II, 1898, p. 43 (footnote, on synonymy); Drake, Mem. Carn. Mus., IX, 1922, p. 359.

Recorded in the literature from Bolivia and Brazil. Specimens have been examined from these countries, also from Paraguay. One example, labeled "*Bolivie (Chiquitos), d'Orbigny, 1834,*" probably represents one of Blanchard's types. Champion (1898, p. 43) states that Stål's type of *T. (Americia) albilatera* agrees perfectly with Blanchard's figure of *T. triangularis*. An example from São Paulo, Brazil, is figured.

This large and very distinct species belongs to the division of the genus *Teleonemia* Stål, which has the costal area broad and composed of more than one row of areolæ. The paranota are strongly reflexed and biseriate. In an example from Bahia, Brazil, the paranotum is uniseriate on one side and biseriate on the other. The costal area varies from four to six areolæ at its widest part. The areolæ are somewhat confused and not arranged in very regular rows. The spines on the head also exhibit some variation in size.

3. *Teleonemia limbata* (Stål)

Tingis (Americia) limbata Stål, Enum. Hemip., III, 1873, p. 131 (Bogota, Nova Granada; Rio Janeiro, ♂, ♀; Mus. Holm.).

Teleonemia (Americia) limbata Champion, Trans. Ent. Soc. Lond., 1898, p. 62, Pl. III, fig. 10.

Numerous specimens have been examined from Brazil and Paraguay. The type from Rio Janeiro, Brazil, has been figured by Champion.

Recognizable by the almost entirely biseriate costal area, strongly foliaceous carinæ, and the distinctly raised, roof-like anterior portion of the pronotum. The latter forms a hood-like structure and is slightly produced in front.

4. *Teleonemia morio* (Stål)

Tropidocheila morio Stål, Öfvers. af K. Vet. Acad. Förh., 1855, p. 187.

Lacometopus morio Stål, Rio Hemip., I, 1860, p. 65 (Rio Janeiro, ♂, ♀; Mus. Holm.).

Teleonemia (*Amaurosterphus*) *morio* Stål, Enum. Hemip., III, 1873, p. 131 (Rio Janeiro; Mus. Holm.).

Teleonemia (*Amaurosterphus*) *morio* Champion, Trans. Ent. Soc. Lond., 1898, p. 61, Pl. III, fig. 2.

Specimens are at hand from Rio Janeiro, Bahia, Chapada, Entre Rios, Brazil; and from Balén, Paraguay. Champion (1898, p. 61) figured Stål's type from Rio Janeiro. The uniseriate costal area, sub-globose hood and black color are distinguishing characters.

5. ***Teleonemia aterrима*** (Stål) (Plate XXXVI, fig. 15)

Teleonemia (*Teleonemia*) *aterrima* Stål, Enum. Hemip., III, 1873, p. 131 (Nova Granada, Bogota, ♂; Mus. Holm.).

Teleonemia aterrима Champion, Trans. Ent. Soc. Lond., 1898, p. 62, Pl. III, fig. 3.

Black species with uniseriate costal area. Specimens vary in size, length of antennæ and degree of elevation of hood-like anterior portion of pronotum. Several examples: Santarem, Brazil; Marcapata, Peru; and Colombia. Champion illustrated a specimen in the Oxford Museum from the Amazons. A specimen from Santarem, Brazil, is figured.

6. ***Teleonemia validicornis*** (Stål)

Teleonemia (*Teleonemia*) *validicornis* Stål, Enum. Hemip., III, 1873, p. 132 (Bogota, ♂; Mus. Holm.).

Teleonemia validicornis Champion, Trans. Ent. Soc. Lond., 1898, p. 62, Pl. III, fig. 4.

Very common and widely distributed: Para, Santarem, and Bahia, Brazil; Cayenne, French Guiana; Pernambuco, Mallali, British Guiana; and Paramaribo, Dutch Guiana. A long series of specimens from Bahia were taken upon the leaves of *Mucherium oblongifolium* V. *subglabrum* by Dr. Gregorio Bondar.

7. ***Teleonemia luctuosa*** (Stål)

Lacometopus luctuosus Stål, Rio Hemip., I, 1860, p. 65 (Rio Janeiro, ♂; Mus. Holm.).

Teleonemia (*Teleonemia*) *luctuosa* Stål, Enum. Hemip., III, 1873, p. 132 (Rio Janeiro; Mus. Holm.).

Teleonemia luctuosa Champion, Trans. Ent. Soc. Lond., 1898, p. 62, Pl. III, fig. 5.

Rare in collections. Two specimens from Rio Janeiro, Brazil, seem to agree with the original description and Champion's figure of the type. Known also from Paraguay. Median portion of pronotum in front broadly and only moderately elevated, faintly produced in front. Pronotum rugulose, shiny, coarsely pitted, the lateral carinæ distinctly constricted near the middle. Costal area very narrow, the areolæ narrow and long.

8. *Teleonemia proluxa* (Stål)

Lacometopus proluxus Stål, Rio Hemip., I, 1860, p. 65 (Rio Janeiro, ♂; Mus. Holm.).

Teleonemia (Teleonemia) proluxa Stål, Enum. Hemip., III, 1873, p. 132 (Rio Janeiro; Mus. Holm.).

Acanthia sacchari Fabricius, Ent. Syst., IV, 1794, p. 77.

Monanthia (Tropidocheila) sacchari Stål, Stett. Ent. Zeit., 1862, p. 325.

Teleonemia proluxa Champion, Biol. Centr.-Amer., Rhynch., II, 1898, p. 39 (describes varieties α and β).

One of the commonest and most widely distributed members of the genus in South America. Many examples from Brazil, Paraguay, Peru, Argentina, Panama, British Guiana, and Colombia; also recorded from Central America and Mexico.

Very variable in size and color, and difficult to understand. Perhaps more than one species may be represented under the name *proluxa* Stål and the varieties as described by Champion.

9. *Teleonemia scrupulosa* (Stål)

Teleonemia (Teleonemia) scrupulosa Stål, Enum. Hemip., III, 1873, p. 132 (Rio Janeiro; Bogota, ♂, ♀; Mus. Holm.).

Teleonemia scrupulosa Champion, Biol. Centr.-Amer., Rhynch., II, 1898, p. 40, Pl. III, figs. 12 and 12a.

Teleonemia lantanae Distant, Entomologist, XL, 1907, p. 60.

Teleonemia bifasciata Distant (not Champion) Bull. Soc. Ent. France, No. 15, 1905, p. 216; Kirkaldy, Proc. Hawaiian Ent. Soc., I, 1908, p. 190.

Teleonemia lantanae Kirkaldy, Proc. Hawaiian Ent. Soc., I, 1907, p. 154, and 1908, pp. 182-190.

One of the commonest and the most widely distributed member of the genus *Teleonemia* in the Western Hemisphere—ranging from Texas and Florida south through the West Indies, Mexico, Central America, and into Colombia and Brazil. The long series of specimens includes three determined by Champion and one of Stål's cotypes from Bogota.

Breeds on mint, *Lantana* spp., and often found in abundance on this plant. Regarding this insect in Hawaii, Kirkaldy (1907, p. 154) states "This tingid was purposely introduced from Mexico to check the *Lantana camara* and has already succeeded to a wonderful degree."

10. *Amblystira pallipes* (Stål)

Monanthia (Tropidocheila) pallipes Stål, Rio Hemip., I, 1860, p. 62 (Rio Janeiro; Mus. Holm.).

Amblystira pallipes Stål, Enum. Hemip., III, 1873, p. 120 and 129 (Rio Janeiro; Mus. Holm.).

Amblystira pallipes Champion, Trans. Ent. Soc. Lond., 1898, p. 61, Pl. II, fig. 12.

Known heretofore only from the types, Rio Janeiro, Brazil. Two examples: Rio Frio, Colombia; Corumba, Matto Grosso, Brazil. *A. silvicola* Drake is a closely allied species. The latter differs in having the apical portion of the discoidal area acutely angulate and strongly raised at the apex; the costal area is also broader and much lighter in color at its widest part.

11. ***Sphærocysta inflata*** (Stål) (Plate XXXVI, fig. 5)

Tingis (?) *inflata* Stål, Rio Hemip., I, 1860, p. 64 (Rio Janeiro, ♀; Mus. Holm.).
Sphærocysta inflata Stål, Enum. Hemip., III, 1873, p. 128 (Rio Janeiro; Mus. Holm.).

Described from specimens collected in Rio Janeiro, Brazil, and known only from there. The larger hood, broader costal area and much broader posterior portion of the paranota separate it from *globifera*. Six species of *Sphærocysta* have been described, all from Brazil. The type, Stockholm Museum, is figured.

12. ***Sphærocysta globifera*** (Stål)

Tingis (?) *globifera* Stål, Rio Hemip., I, 1860, p. 65 (Rio Janeiro, ♂, ♀; Mus. Holm. et Stål).
Sphærocysta globifera Stål, Enum. Hemip., III, 1873, p. 128 (Rio Janeiro; Mus. Holm.).
Sphærocysta globifera Champion, Trans. Ent. Soc. Lond., 1898, p. 61, Pl. II, fig. 11 and 11a.

Many specimens, all from Brazil. The very narrow, uniseriate paranota separate this insect at once from *S. stáli* Drake. In the latter the tumid elevations of the elytra and the inflated, apical portion of the median carina are larger. *Globifera* is the logotype of the genus *Sphærocysta* Stål.

13. ***Tigava præcellens*** (Stål)

Tigava præcellens Stål, Rio Hemip., I, 1860, p. 63 (Rio Janeiro, ♀; Mus. Holm.).
Tigava præcellens Stål, Enum. Hemip., III, 1873, p. 121 and 130 (Rio Janeiro; Mus. Holm.).
Tigava præcellens Champion, Trans. Ent. Soc. Lond., 1898, p. 61, Pl. III, fig. 1.

The genus *Tigava* was founded by Stål for *præcellens* from Rio Janeiro, Brazil. Several specimens are at hand from Chápada and Corumba (Matto Grosso), Brazil; and one from Cochabamba, Bolivia. The broader costal area and paranota, the more prominent carinæ, and slightly smaller size separate *præcellens* from *convexicollis* Champ. In addition to the above species, the genus contains *T. semota* Drake, *nobilis* Drake, and *cassiæ* Drake and Hambleton. Several other species described as *Tigava* have been recently transferred to the genus *Campylotingis* Drake.

14. *Acanthochila armigera* (Stål)

Monanthia (Acanthocheila) armigera Stål, Rio Hemip., I, 1860, p. 61 (Rio Janeiro, ♂, ♀; Mus. Holm. et Stål).

Acanthochila armigera Stål, Enum. Hemip., III, 1873, p. 127 (Rio Janeiro; Mus. Holm.).

Monanthia spinuligera Stål, Rio Hemip., I, 1860, p. 61.

Acanthochila spinuligera Stål, Enum. Hemip., III, 1873, p. 127.

Acanthocheila armigera Champion, Biol. Centr.-Amer., Rhynch., II, 1897, p. 28, Pl. II, figs. 19 and 19a.

Widely distributed; specimens have been examined from Brazil, Peru, Bolivia, Colombia, Panama, Nicaragua, Honduras, Porto Rico, Cuba, Jamaica, Haiti, and Trinidad. Recently the writers have received a series of specimens from Brownsville, Texas, collected by J. M. Knull. Very variable in size, ranging from 3.00 to 5.50 mm. in length. Marginal spines of paranota and elytra are also variable in number and length.

15. *Leptocysta sexnebulosa* (Stål) (Plate XXXVI, fig. 13)

Tingis sex-nebulosa Stål, Rio Hemip., I, 1860, p. 64 (Rio Janeiro, ♂; Mus. Holm.).

Leptocysta sexnebulosa Stål, Enum. Hemip., III, 1873, p. 127 (Rio Janeiro; Mus. Holm.).

Leptocysta sexnebulosa Champion, Trans. Ent. Soc. Lond., 1898, p. 61, Pl. II, figs. 10 and 10a.

Known from Argentina, Brazil, Paraguay, and Colombia. *L. novatis* Drake from Argentina, the only other member of the genus, may readily be distinguished from it by the much less swollen and shorter pronotum and by the very short lateral carinae, which strongly divaricate posteriorly. A specimen from Brazil is figured.

16. *Leptodictya ochropa* (Stål) (Plate XXXVI, fig. 4)

Monanthia (Physatocheila) ochropa Stål, Rio Hemip., I, 1860, p. 62 (Rio Janeiro, ♂; Mus. Holm.).

Leptodictya ochropa Stål, Enum. Hemip., III, 1873, p. 127 (Rio Janeiro; Mus. Holm.).

Size and color quite variable, especially color of costal area. The color of the broad marginal border of elytra varies from brown to very dark fuscous; costal margin closely and finely serrate.

In Boletim do Museu Nacional, Vol. VII, No. 2, 1931, pp. 119-122, Drake divides the genus *Leptodictya* Stål into the subgenus *Leptodictya* Drake (type = *ochropa* Stål) and *Hanuala* Kirkaldy (type = *leinahoni* Kirkaldy). In *ochropa* (only member of subgenus *Leptodictya*) the paranota are completely reflexed from the base and conform to and rest entirely upon the upper surface of the pronotum.

Known only from Brazil; specimens from Bahia, São Paulo, and Diamantina have been examined. Stål's type in the Stockholm Museum is figured.

17. **Leptodictya approximata** (Stål) (Plate XXXVI, fig. 3)

Monanthia (Physatocheila) approximata Stål, Rio Hemip., I, 1860, p. 63 (Rio Janeiro; Mus. Holm.).

Leptodictya approximata Stål, Enum. Hemip., III, 1873, p. 127 (Rio Janeiro; Mus. Holm.).

Two examples: São Paulo, Brazil and Blairmont, British Guiana. Stål's type from Rio Janeiro is figured. Carinæ foliaceous, each uniseriate. Head brown, with five long, slender, testaceous spines.

18. **Leptodictya fuscocincta** (Stål)

Monanthia (Physatocheila) fusco-cincta Stål, Rio Hemip., I, 1860, p. 62 (Rio Janeiro, ♀; Mus. Holm. et Stål).

Leptodictya fusco-cincta Stål, Enum. Hemip., III, 1873, p. 127 (Rio Janeiro; Mus. Holm.).

Known only from specimens in the Stockholm Museum. Stål's type from Rio Janeiro has been figured by Champion.

19. **Leptodictya dohrni** (Stål) (Plate XXXVI, fig. 1)

Monanthia (Physatocheila) dohrnii Stål, Rio Hemip., I, 1860, p. 62 (Rio Janeiro, ♀; Mus. Holm.).

Leptodictya dohrnii Stål, Enum. Hemip., III, 1873, p. 127 (Rio Janeiro; Mus. Holm.).

Known only from the type locality and a series of specimens from Tambo Euenas, Peru. Stål's type from Rio Janeiro is figured.

20. **Leptodictya lepida** (Stål) (Plate XXXVI, fig. 2)

Monanthia (Physatocheila) lepida Stål, Rio Hemip., I, 1860, p. 63 (Rio Janeiro; Mus. Stål).

Leptodictya lepida Stål, Enum. Hemip., III, 1873, p. 127 (Rio Janeiro; Mus. Holm.).

Known only from the type locality, Rio Janeiro, Brazil. Stål's type is figured.

21. **Leptopharsa vittipennis** (Stål) (Plate XXXVI, fig. 11)

Leptostyla vittipennis Stål, Enum. Hemip., III, 1873, p. 126 (Rio Janeiro, ♂; Mus. Holm.).

One specimen, Vilcanota, Peru. Stål's type from Rio Janeiro, Brazil, is figured. Resembles *L. furculata* Champion in color and general appearance, but longer, with wider costal area, and fuscous-black basal segment of antennæ.

22. *Leptopharsa furcata* (Stål) (Plate XXXVI, fig. 7)

Leptostyla furcata Stål, Enum. Hemip., III, 1873, p. 126 (Rio Janeiro, ♂, ♀; Mus. Holm.).

Leptostyla furcata Champion, Trans. Ent. Soc. Lond., 1898, p. 60, Pl. II, figs. 7, 7a.

Known only from type specimen. The type is figured.

23. *Leptopharsa hyaloptera* (Stål)

Leptostyla hyaloptera Stål, Enum. Hemip., III, 1873, p. 126 (Rio Janeiro, ♂, ♀; Mus. Holm.).

Head brown, shiny, tumid above; median spine short, blunt, porrect; posterior spines short, resting upon surface of head; frontal spines very short. Spines, paranota and carinæ testaceous. Antennæ long, yellowish brown; segment I rather stout, three times as long as II. Bucculæ testaceous, closed in front. Rostral channel open behind, the laminæ widely separated on mesosternum, the rostrum extending almost to end of mesosternum. Pronotum moderately tumid, distinctly pitted, dark reddish brown, tricarinate; lateral carinæ foliaceous, practically parallel, uniseriate, the areolæ small; median carina slightly more elevated. Hood moderately large, slightly projecting anteriorly. Elytra, wings, and last segment of antennæ wanting in this specimen. Legs testaceous, long, slender.

The above notes were taken from Stål's type in the Stockholm Museum. *Leptopharsa ignota* D. & H. is a closely allied species. The latter has a slightly larger hood, the lateral carinæ slightly converging posteriorly and the paranota bi-triseriate. *Hyaloptera* is known only from the type specimens.

24. *Leptopharsa elegantula* Stål

Leptopharsa elegantula Stål, Enum. Hemip., III, 1873, p. 126 (Bogota, Nova Granada, ♂; Mus. Holm.).

Leptopharsa elegantula Champion, Trans. Ent. Soc. Lond., 1898, p. 60, Pl. II, fig. 8.

Four examples, Cochabamba, Bolivia; type from Rio Janeiro has been figured by Champion. Pronotum tricarinate; each carina indistinctly areolate. Costal area whitish testaceous, mostly biseriate, irregularly triseriate at widest part. Paranota biseriate, the areolæ (also of costal area) transparent and somewhat iridescent.

A closely allied species, *Leptoharsa distantis* Drake, from Mexico and Haiti may be separated from *elegantula* by its smaller size, less elevated carinæ, and the elevated anterior portion of the median carina; the discoidal area is also shorter and broader at apex.

25. *Leptopharsa marginella* (Stål) (Plate XXXVI, fig. 6)

Monanthia (Tropidocheila) marginella Stål, Rio Hemip., I, 1860, p. 62 (Rio Janeiro; Mus. Holm.).

Leptopharsa marginella Stål, Enum. Hemip., III, 1873, p. 126 (Rio Janeiro; Mus. Holm.).

Known only from the type, which is figured. The very narrow paranota and lateral carinæ are quite distinctive. The structure of the pronotum, lateral carinæ, and head seem to indicate that *marginella* may not be very typical of the genus *Leptopharsa*.

26. *Stephanitis mitrata* (Stål)

Tingis mitrata Stål, Rio Hemip., I, 1860, p. 64 (Rio Janeiro, ♀; Mus. Holm.).

Stephanitis mitrata Stål, Enum. Hemip., III, 1873, p. 123 (Rio Janeiro; Mus. Holm.).

Stephanitis mitrata Champion, Trans. Ent. Soc. Lond., 1898, p. 58, Pl. II, fig. 3, 3a.

Known only from Rio Janeiro, Brazil, the type locality. Champion has published an excellent figure of Stål's type.

27. *Leptobyrsa steini* (Stål)

Tingis steini Stål, Rio Hemip., I, 1860, p. 64 (Rio Janeiro, ♂; Mus. Holm. et Stål).

Leptobyrsa steinii Stål, Enum. Hemip., III, 1873, p. 123 (Rio Janeiro; Mus. Holm.).

Leptobyrsa steini Champion, Trans. Ent. Soc. Lond., 1898, p. 58, Pl. II, fig. 4.

Determination of this species is based upon a cotype from Rio Janeiro, Brazil. It also agrees with Champion's figure of Stål's type. Several specimens from Brazil have been examined.

28. *Gargaphia flexuosa* (Stål) (Plate XXXVI, fig. 10)

Monanthia flexuosa Stål, Rio Hemip., I, 1860, p. 61 (Rio Janeiro, ♀; Mus. Holm.).

Gargaphia flexuosa Stål, Enum. Hemip., III, 1873, p. 124 (Rio Janeiro; Mus. Holm.).

Known only from Rio Janeiro, Brazil. The type is figured.

29. *Gargaphia patricia* (Stål)

Monanthia (Phyllontochila) patricia Stål, Stett. Ent. Zeit, XXIII, 1862, p. 324 (Mexico; Mus. Holm.).

Gargaphia patricia Stål, Enum. Hemip., III, 1873, p. 125 (Mexico; Mus. Holm.).

Gargaphia patricia Champion, Biol. Centr.-Amer., Rhynch., II, 1897, p. 9, Pl. I, fig. 12, 12a.

Gargaphia patricia Drake, Ann. Carn. Mus., XVI, 1926, p. 377.

Very common in Mexico and Central America. Many other specimens are at hand from the West Indies, Colombia, and Argentina.

30. *Gargaphia obliqua* Stål, (Plate XXXVI, fig. 9)

Gargaphia obliqua Stål, Enum. Hemip., III, 1873, p. 124 (Rio Janeiro, ♂; Mus. Holm.).

Many examples, Rio Janeiro, Chapada, Vicosá, and Pedro Leopoldo, Brazil. Feeds on *Serjania* spp. Stål's type is figured.

31. *Gargaphia formosa* (Stål)

Monanthia (Phyllontocheila) formosa Stål, Rio Hemip., I, 1860, p. 61 (Rio Janeiro, ♀; Mus. Holm. et Stål).

Gargaphia formosa Stål, Enum. Hemip., III, 1873, p. 125 (Rio Janeiro; Mus. Holm.).
Tingis formosa Göldi, Mitth. Schweiz. Ent. Ges., VIII, 1886, pp. 234 and 241.

One specimen, Rio Janeiro, Brazil, and known only from there. Costal area broad, with a broad, transverse, black-fuscous band (formed by colored nervures) a little in front of the middle, the areolæ rather large, somewhat variable in size, not arranged in very regular rows, six cells at widest part; subcostal area triseriate; discoidal area narrow, short, impressed, most of nervelets black-fuscous, composed of four rows of areolæ at widest part. Paranota broad, strongly reflexed, widest opposite humeri, there four areolæ deep. Pronotum black, tricarinate, each carina composed of a single row of moderately large cells; the median carina more strongly raised. Antennæ long, pilose; segments I and II dark brown, the first constricted near apex, considerably thicker and three times as long as the second; III testaceous, two and one-half times as long as IV, the latter long and blackish.

32. *Gargaphia munda* (Stål) (Plate XXXVI, fig. 12)

Monanthia (Phyllontocheila) munda Stål, Rio Hemip., I, 1860, p. 60 (Rio Janeiro, ♀; Mus. Holm. and Stål).

Gargaphia munda Stål, Enum. Hemip., III, 1873, p. 124 (Rio Janeiro; Mus. Holm.).

Monanthia lineifera Walker, Cat. Hemip., VI, 1873, p. 194 (Brazil).

Gargaphia magna Gibson, Trans. Amer. Ent. Soc., XLV, 1919, p. 194.

Gargaphia munda Drake, Bull. Ent. Soc. Fla., V, 1922, p. 41.

Common and quite generally distributed in Brazil and Peru. Breeds upon *Brunfetsia* sp. and *Solanum* spp. (Solanaceæ). *G. magna* Gibson (type, U. S. N. M.) is a synonym of *G. munda* Stål.

33. *Gargaphia simulans* (Stål) (Plate XXXVI, fig. 8)

Monanthia (Phyllontocheila) simulans Stål, Rio Hemip., I, 1860, p. 61 (Rio Janeiro, ♀; Mus. Holm.).

Gargaphia simulans Stål, Enum. Hemip., III, 1873, p. 124 (Rio Janeiro; Mus. Holm.).

Known only from Rio Janeiro, Brazil. Stål's type is figured.

34. *Gargaphia trichoptera* Stål

Gargaphia trichoptera Stål, Enum. Hemip., III, 1873, p. 125 (Bogota, Nova Granada, ♂, ♀; Mus. Holm.).

Gargaphia trichoptera Champion, Trans. Ent. Soc. Lond., 1898, p. 58, Pl. II, fig. 5.

Antennæ long, rather densely clothed with long, fine hairs, brownish testaceous, the apical segment black; segment I thicker and two and one-half times as long as II; III three times as long as IV. Head brown, tumid above, with fine, long, sharp, slender, testaceous spines, the median longest and porrect. Hood testaceous, rather small, compressed laterally, faintly produced in front. Pronotum tricarinate, black, the triangular portion testaceous; carinæ strongly foliaceous, each uniseriate, the areolæ moderately large. Paranota broad, strongly reflexed, testaceous, the lateral margin finely serrate; costal area very broad, with five or six enlarged, oblique, brown to fuscous nervures, the areolæ moderately large, slightly variable in size and not arranged in regular rows; subcostal area mostly biseriate; discoidal area long, broad, narrowed at both base and apex, widest slightly beyond the middle, there six or seven areolæ deep. Nervures sparsely clothed with long, very fine hairs.

The above notes were taken from a male, cotype, Bogota, Colombia; not known from elsewhere. Champion has published an excellent figure of Stål's type.

35. *Gargaphia nigrinervis* Stål

Gargaphia nigrinervis Stål, Enum. Hemip., III, 1873, p. 125 (Bogota, ♂; Mus. Holm.).

Gargaphia nigrinervis Champion, Biol. Centr.-Amer., Rhynch., vol. II, 1897, p. 10, Pl. I, figs. 13, 13a.

Very common and widely distributed in Colombia and Panama. The smaller size and angulate paranota separate it from *G. trichoptera* Stål.

36. *Corythaica monacha* (Stål)

Tingis monacha Stål, Rio Hemip., I, 1860, p. 64 (Rio Janeiro, ♂, ♀; Mus. Holm. and Stål).

Corythaica monacha Stål, Enum. Hemip., III, 1873, p. 128 (Rio Janeiro; Mus. Holm.).

Corythaica monacha Drake and Bruner, Mem. Soc. Cuba Hist. Nat., VI, 1924, p. 151.

The members of the genus *Corythaica* have been greatly confused in the literature. Drake and Bruner (1924, p. 151) pointed out the differences between *C. monacha* Stål and *C. planaris* Uhler. The two species are quite distinct and not easily confused.

C. planaris Uhler: larger, thicker veins and more widely reticulated; hood larger, somewhat flattened behind; median carina not distinctly arched, almost entirely uniseriate, slightly more elevated than lateral ones; discoidal area impressed along the inner margin and distinctly elevated towards subcostal margin; subcostal area bi- to triseriate; costal area largely biseriate, the areolæ not arranged in regular rows, the transverse fascia very distinct to almost entirely wanting.

Planaris is very common in the West Indies and South America and feeds upon *Solanum* spp. It is a pest of considerable importance of the cultivated egg plant. Under the name of *monacha* (= *planaris* Uhl.), Cotton, Journ. Dept. Agr., Porto Rico, I, 1917, pp. 170-173, published on its habits and life history. Most of the records of *C. monacha* (not Stål) from the West Indies should be referred to *planaris* Uhler. The writers' determination of *planaris* is based upon one of Uhler's cotypes from the British Museum. The color is quite variable, and the median carina is more elevated in some specimens than in others.

C. monacha Stål: smaller than *planaris*; hood narrower, inflated behind; median carina strongly arched, there biseriata. Elytra with large tumid elevation, which is formed by the elevation of boundary between subcostal and discoidal areas; discoidal area not impressed, its entire surface sloping towards sutural area, not bounded by prominent nervures.

Known from Brazil, Argentina, and Chile. The determination is based upon one of Stål's cotypes. The size, hood, median carina and discoidal area furnish good characters for the separation of this species from *planaris* Uhl.

37. *Corythucha fuscomaculata* (Stål)

Tingis fusco-maculata Stål, Rio Hemip., I, 1860, p. 63 (Rio Janeiro, ♂, ♀; Mus. Holm. and Stål).

Corythucha fusco-maculata Stål, Enum. Hemip., III, 1873, p. 123 (Rio Janeiro; Nova Granada; Mus. Holm.).

Corythucha fuscomaculata Champion, Trans. Ent. Soc. Lond., 1898, p. 57, Pl. II, fig. 2.

Found abundantly in Brazil and Peru; the commonest member of the genus *Corythucha* in South America.

EXPLANATION OF PLATE XXXVI

Figures 1 to 11 are by Thérèse Ekblom; figures 12 to 15 by Margaret E. Poor.

- FIG. 1. *Leptodictya dohrni* (Stål).
- FIG. 2. *Leptodictya lepida* (Stål).
- FIG. 3. *Leptodictya approximata* (Stål).
- FIG. 4. *Leptodictya ochropa* (Stål).
- FIG. 5. *Sphaerocysta inflata* (Stål).
- FIG. 6. *Leptopharsa marginella* (Stål).
- FIG. 7. *Leptopharsa (Leptostyla) furcata* (Stål).
- FIG. 8. *Gargaphia simulans* (Stål).
- FIG. 9. *Gargaphia obliqua* Stål.
- FIG. 10. *Gargaphia (Monanthia) flexuosa* (Stål).
- FIG. 11. *Leptopharsa (Leptostyla) vittipennis* (Stål).
- FIG. 12. *Gargaphia munda* (Stål).
- FIG. 13. *Leptocysta sexnebulosa* (Stål).
- FIG. 14. *Teleonemia (Tingis) triangularis* (Blanchard).
- FIG. 15. *Teleonemia aterrima* (Stål).

